Synopsis Of Thesis Entitled To The Subject Economics, Faculty of Humanitics for the Ph.D. Programme.

SOCIO-ECONOMIC IMPACT OF PRADHAN MANTRI FASAL BIMA YOJNA (PMFBY) ON ITS BENEFICIARIES (KHARIF - 2018-23) IN NANDED DISTRICT.

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1.1. INTRODUCTION

Risk and uncertainty are ubiquitous in agriculture as an economic activity due to inherent biological uncertainties. This is more so in developing countries such as India, where agriculture is mainly rainfed and irrigation facilities are very limited. In India, the gross irrigated area is 47.6 percent and if we look at the state wise data, a more dismal picture emerges. It is only three states, Punjab, Haryana and Uttar Pradesh where major part of gross cropped area is irrigated. However, most states have less than half or even less than one fourth of the gross cropped area (GCA) under irrigation. For example, in Maharashtra (which has four times the Net Sown Area of Punjab), the gross irrigated area is only 18.5 percent (Government of India, 2016). This clearly indicates the dependence of agriculture on rainfall and any failure of monsoons has an adverse impact on production. In fact, agricultural production is impacted by both biotic and abiotic stress. Biotic factors such as pests, insects, and abiotic stresses such as drought, floods, and extreme temperatures can destroy the standing crop. While fall in production due to drought is common, in case of favourable weather also there is price risk as prices tend to crash in the event of bumper crop. Other risks faced by farmers may be due to policy, when the government at times suddenly announces export bans or increase in Minimum Export Price. Protectionist policies of other countries may also impact domestic prices and farmers tend to lose on the price front. Overall, it is clear that farming operations can lead to negative outcomes that emerge from imperfectly predictable weather conditions, price volatility, etc.

Although agriculture is an enterprise that is fraught with risk, it still continues to be demographically the dominant source of economic activity in India. This is so, despite a seven decade journey for the country since independence, which clearly reveals lack of opportunities in other sectors and limited rural non-farm employment. While this sector has experienced technological interventions which have contributed to self-sufficiency in food grains and diversification to commercial and horticultural crops, the overall scenario in this sector is that of stagnation, underperformance and lack of dynamism. The contribution of agriculture to Gross Domestic Product (GDP) is presently 14 percent (2015-16) while workforce engaged in this sector is 54.6 percent (2011 census). The average size of holding is fast declining and is presently 1.16 hectares with 66.8 percent of holdings being marginal and 18 percent being small (Agricultural Census 2010-11) and therefore constituting 84.8 percent of total holdings. Small size of holdings is making the farmers more vulnerable. The Eleventh Plan target growth of 4 percent per annum for the agricultural sector could not be achieved as the average growth

rate turned out to be 3.67 percent per annum while that of the economy as a whole was 7.9 per cent. Again in the Twelfth Plan (2012-17) for agriculture, the growth rate in the agricultural sector was 2.57 per cent per annum, while the overall economy grew at about 7 percent per annum during the corresponding period.

Although, slower growth of GDP in agriculture compared to other sectors is expected, the main failure has been the inability to reduce the dependence of the workforce on agriculture. This has significantly led to marginalization of land holdings coupled with low productivity and even crop failure in agriculture. Low yield is often associated with failure of monsoons or unseasonal rains, and/or natural calamities which may also result in the crop being destroyed by pests, insects, etc. In order to cope up with risk, farmers have their own informal mechanisms such as crop diversification, maintaining buffer stocks, sale of assets in case of urgent need of cash or even migration in the event of crop failure. The government also has various social assistance schemes to safeguard the interests of farmers. Besides resorting to various mechanisms both formal as well as informal, to cope up with crop loss, crop insurance is an important instrument which protects the investment of farmers and also strengthens his risk bearing capacity. Further, since most farmers take loans such as crop loans from institutional sources, the risk of becoming a defaulter is minimized if his crop is insured.

In view of the above and given that agriculture in India is risky due to dependence on monsoon as well as due to biotic and abiotic stress, the policy makers in India began to give attention to crop insurance. Since the last three decades or so, the government has been implementing crop insurance schemes which are being framed in such a way that more and more farmers can benefit from it. In 1985, the Government of India introduced the Comprehensive Crop Insurance Scheme (CCIS) which operated on Area Approach, and the 3 taluka /block was considered to be the unit for calculating premium and level of indemnity payments. The scheme was compulsory for and restricted to farmers who availed of crop loans from financial institutions and the premium charged was 2 percent of the crop loan borrowed for cereals and 1 percent of the sum insured for oilseeds and pulses. The sum insured was 100 percent of the crop loan disbursed to the farmer with a ceiling of Rs 10,000/. An evaluation of crop insurance schemes (Bhende, 2005) revealed several shortcomings of the scheme such as low premium rates which have no actuarial basis. The scheme also faced the problems of adverse selection and moral hazard. The scheme which continued till 1999 resulted in a claim premium ratio of 13.31.

In order to address the shortcomings and improve the CCIS, a broad based National Agriculture Insurance Scheme (NAIS) or Rashtriya Krishi Bima Yojana (RKBY) was Introduced from Rabi 1999-2000 season, with area approach and subsidy was provided to only small and marginal farmers. The scheme was designed to cover both borrowers and non borrowers from credit institutions. It was compulsory for borrowers and voluntary for non borrowers. The premium ranged from 1.5 percent of sum insured which was equal to the crop loan advanced, to 3.5 percent and notified crops were cereals, pulses and oilseeds. For horticultural crops the premium was based on actuarial rate. The working of the scheme since inception till 2015-16 indicated that for the entire period the claim to farmer premium ratio was 4.03 and out of 271.1 million farmers who were covered under the scheme, 83.68 million or 30.86 percent benefitted. Out of the gross premium collected, the farmers paid 85 percent while 11 percent was paid by state government and balance by centre (calculated from data in Government of India 2016).

Besides NAIS, a Modified National Agricultural Insurance scheme (MNAIS) was introduced on pilot basis in 50 districts of the country from Rabi season 2010-11. The main features of MNAIS were actuarial premium with subsidy in premium (shared by centre and state) upto 75 percent to farmers, unit area of insurance reduced to village/village panchayat level, indemnity for prevented sowing/planting risk and for post harvest losses due to cyclones in coastal areas. Since inception till 2015-16, it was observed that the claim to farmers' premium ratio was 2.2 and out of 27.7 million farmers who were covered under the scheme over the entire period, 9.5 million or 34 percent benefitted. Out of gross premium over the entire period, 43.3 percent was paid by farmers, 27.8 percent by Centre and 28.9 percent by state (calculated from data in Government of India 2016).

In addition, the Government of India launched a Weather Based Crop Insurance Scheme (WBCIS) on pilot basis in 20 states, from Kharif season 2007. This scheme aims to provide insurance protection to farmers against adverse weather conditions such as deficit or excess rainfall, high or low temperature, humidity, etc. which are deemed to have adversely impacted the crop production. WBCIS was applicable to all farmers but compulsory for loanee farmers on payment of actuarial premium, with premium subsidy ranging from zero to 50 percent to all farmers irrespective of their holdings to be equally shared by centre and states. Out of gross premium the share paid by farmers was 36 percent while 64 percent was shared equally by centre and state. The claim to farmer premium ratio was 2.2. Since inception till 2015-16, number of farmers covered was 72.42 million and 51.26 million or 71 percent benefitted from the scheme (calculated from data in Government of India 2016). Commencing

from Rabi season 2013-14, the Government of India launched the National Crop Insurance Program (NCIP) throughout the country as an umbrella scheme covering MNAIS and WBCIS where premium was to be charged on actuarial basis with subsidy ranging from zero to 75 percent to all farmers irrespective of their size of holding and shared equally by centre and state. The NAIS also continued along with WBCIS component of NCIP.

Finally the Government of India launched the Pradhan Mantri Fasal BimaYojana (PMFBY) and restructured WBCIS from Kharif season 2016, replacing NAIS and NCIP. PMFBY is an improvement over NAIS and MNAIS and is designed to reduce the burden of crop insurance on farmers.

1.2. Objectives of Research Study

1. To evaluate the performance of PMFBY along with its implementation including insurance companies, as well as, analyse its background in the state.
2. To analyse the socio-economic profile of insured farmers vis-à-vis non-insured farmers under Kharif -2018-23.
3. To analyse the insurance behavior and awareness level of sampled household under PMFBY in the state.
4. To study the stakeholders perspectives and to identify the constraints (issues & challenges) hindering the performance of the scheme.

1.3 Review of literature

Mote *et al*. (2016) A study was an attempt, conducted in Pune district of Maharashtra to assess the extent of marketing knowledge of respondents and to identify the problems faced by them under Crop Insurance Scheme in the study area. In Pune District only 13per cent farmer are benefited by crop Insurance scheme and rest 87% were not benefited by any crop insurance scheme. So, farmers are to be promoted more about the crop insurance scheme so that it would facilitate in increasing their income.

Niranjan *et al* (2019) To identify insurance behaviour of insured farmer's, the study was carried out by Agro Economic Research Centre, JNKVV, Jabalpur. Umaria, Jabalpur and Sagar districts have been selected randomly under the ICICI-Lombard, AIC and HDFC-ERGO were found to be major implementing agencies of PMFBY in Madhya Pradesh. From each agency 40 respondents were selected from the respective districts constituting sample size of 120 respondents. District Cooperative Bank was found to be the main implementing bank in the area under study. 90 per cent of the HHS availed crop insurance facility under PMFBY.

More than 80 per cent HHs were found to be aware of PMFBY and the main source of awareness was found to be TV/Newspaper and relatives/friends (>35%) followed by government awareness programmes (>20%) and insurance companies (>10%) among HHs. The major events of losses were found to be yield loss (36.67%) followed by prevented sowing/planting due to deficit rainfall or adverse weather (3.33%). The compensation secured in Kharif was found to be more in case of loanee insured (Rs. 8236/-) as compared to non-loanee insured (Rs. 6379/-) HHs. The majority of HHs did not know the complete feature of PMFBY in Original Research Article Niranjan et al.; AJAEES, 37(2): 1-6, 2019; Article no.AJAEES.52845 2 totality and opined that this is the same as the previous scheme (90%). It was also observed that 44 and 66 per cent of loanee and non-loanee insured HHs used to inform the event of losses to bank officials (>35%) and local government officials (>57%).

Devi *et al*., (2020) present study entitled "Awareness and Opinion of farmers regarding Pradhan Mantri Fasal Bima Yojana" was undertaken in the year 2019-2020 with objective to see Constraints faced by farmers in getting the benefits of Pradhan Mantri Fasal Bima Yojana in Ashothar and Bahua blocks of Fatehpur, In each block three-three villages were selected therefore 25-25 respondents were selected from two blocks of six villages randomly. A total number of 150 respondents were selected. The study clearly shows that the major constraints is non-availability of insurance agents, Government staff do not talk directly to the farmer, Delay in payments of insurance claims, Farmers adversely affected by the interpersonal relation among members of society, Unawareness about how to measure / assess losses of crop is the most severe technical problem faced by majority of insured farmers.

Darshan *et al*., (2021). In the year 2020-21, a study was conducted in the Tumkur district of Karnataka as district had highest number of insurance units (895) as compared to other districts of the Karnataka state. The findings of the study revealed that delay in getting the claim was the prime constraint faced by the beneficiaries with a highest percentage of 81.67 per cent and as ranked first followed by less compensation offered (80.00 per cent) and getting claims is a complicated procedure (76.67 per cent). With respect to suggestions given by the beneficiaries were before the start of the next season, the claim should be distributed with a percentage of 87.50 and ranked first, followed by organizing awareness programs for farmers regarding PMFBY (78.33 per cent) and representatives from financial institutions and policy makers should monitor and supervise the assessment (72.50 per cent). The study bought out a number of various constraints faced by the farmers related to Crop Insurance Schemes. As a

result, concerned officers should approach the State Government and request that they make earnest efforts to pay the claim before the start of the following season as well as conduct more training and awareness programs.

Suresh & Sreedaya (2022).The study on perception of farmers towards crop insurance schemes in Kerala was carried out in three selected districts of Kerala namely, Kottayam, Malappuram and Idukki in the year 2020-2021. The findings of the study showed that majority of the farmers (69.17 %) had medium perception, followed by low (18.33 %) and high (12.50 %) perception regarding crop insurance schemes in Kerala.The association between profile characteristics of the respondents with their perception towards crop insurance schemes in Kerala showed that characteristics like education, operational landholding, credit orientation and decision making ability had significant association with their perception regarding crop insurance schemes in Kerala. The comparison of the perception of beneficiary farmers towards the three crop insurance schemes namely, Restructured State Crop Insurance Scheme of Kerala (RSCIS), Pradhan Mantri Fasal Bima Yojana (PMFBY) and Restructured Weather Based Crop Insurance Scheme (RWBCIS) revealed that there existed a significant difference between the central and state crop insurance and there existed no significant difference among the two centrally sponsored crop insurance schemes.

1.4. Salient Features of PMFBY.

1. Provides Comprehensive insurance coverage against crop loss on account non-preventable natural risks, thus helping in stabilizing the income of the farmers and encourage them for adoption of innovative practices.
2. Increased risk coverage of crop cycle pre –sowing and post- harvest losses.
3. Area approach for settlement of claims for wide spread damage.
4. Actuarial premium but uniform maximum premium of 2% for Kharif crops, 1.5% for Rabbi crops and 5% for horticultural crops.

Year	No. of farmers Application enrolled (Lakhs) in India
2018-19	577.7
2019-20	612.3
2020-21	613.6

(Ministry of Agriculture and Farmers Welfare)

1.5. Advantages of PMFBY

1. Wide coverage
2. Affordable Premiums.
3. Quick settlement
4. Use of technology
5. Risk management.

1.6. Constraints under PMFBY

1. Experts are unavailable for assessment of crop
2. Lack of awareness of benefits of MFBY.
3. Insufficient of bank facilities in rural area

1.7. Research Assumption.

1. Pradhan Mantri Fasal Bima Yojna helps economically Nanded district farmers in a natural calamities.
2. Pradhan Mantri Fasal Bima yojna reduce the risk in farming sector.
3. The scheme shall be implemented on an area approach basis.
4. Defined area for insurance claim is difficult.

1.8. Research Working Area and Limitations

A random survey of PMFBY stakeholders of selective villages of different Talukas of Nanded district will be undertaken during 2023-2024.

Information from selective no. of sample will be collected for further studies.

Area of research work limited to Nanded district only.

1.9. Selection of no. of samples

120 samples of PMFBY insurance stakeholders will be studied from different 4 talukas of Nanded district.

1.9.1 Methodology

A random data will be collected from the research working area by direct visit. No. of samples select from selective 4 talukas of Nanded district.

1. Primary data source

Primary data source includes direct visit to research working area to take personnel interview, make a schedule, questionary and collection of data by observation. Data collected from research working area is truthful.

For present research study 4 taluka will be selected from Nanded district, total no.of samples is 120.

2. Secondary data source.

Secondary data collection is important in economics. In this source of data collection from other researchers publication and non-publication, books, journal, newspaper, internet and govt. website

3. Analysis of facts

While the research data will be collected by the means of samples selection. In this, maps, designs are present.

1.9.2. Outline of chapters.

Chapter 1. Introdution to PMFBY

The Pradhan Mantri Fasal Bima Yojna (PMFBY) launched on 18 February 2016 by prime Minuster Narendra Modi is an insurance service for farmers for theirs yields. It was formulated in line with one nation one scheme theme by replacing earlier two scheme National Agricultural Insurance Schemes and Modified National Agricultural Insurance Scheme by incorporating their best features and removing their inherent drawbacks. It aims to reduce the premium burden on farmers and ensure early settlement of crop assurance claim for the full insured sum.

Chapter 2. PMFBY in Nanded district.

Chapter second describes in detail profile of Nanded district and Pradhan Mantri Fasal Bima Yojna & Performance of PMFBY in Maharashtra state especially in Nanded district.

Chapter 3. Gives an outlay of the sampling considerations and the design of the study.

Present study will be conducted in Nanded district.

Selection of Talukas: 4 Talukas will be selected randomally

Selection of villages: 3 villages will be selected randomly from each selected taluka

Selection of respondents: From each selected village 5 beneficiary of PMFBY and 5 non- beneficiary will be selected randomly

Chapter 4. Presents the socio-economic characteristics and crop level data pertaining to the sample studied.

The present study will be carried out in Nanded district in the year of data 2021-2022 data to know the Socio- economic characteristics of sample farmers response of insured and uninsured farmers about PMFBY 12 villages selected randomly. The numbers of farmers interviewed will be 120. Out of 120 farmers interviewed 60 will be insured and 60 unisured. A structured schedule will be used to collect the data through survey method

Chapter 5. Analysis of insurance behaviour of the farmers.

Agriculture is a risky prospect, wherever it is subject to vagaries of nature like flood, drought and cyclone.Crop insurance or agricultural insurance is a mechanism through which farmers can protect themselves for loss or destruction of their crop due to events like flood, drought, pests and diseases or as a result of other natural disasters.More precisely, their vulnerability to climate change risks and /or unwillingness to involve in high-risk activities that promise higher returns, and their inability to reside in disaster safe locations . The Commission for Agriculture Costs and Prices (CACP) reckons the premiums to drop to 3.5% of sum insured (SI) if 50% of India's gross cropped area is insured.

The study confined to Nanded district. A list of all the farmers benefited under PMFBY has been prepared and classified under low, moderate and high uptake district by using the Mean ± Standard deviation technique.

Chapter 6. Constraints Faced by the farmer

To complete the above objective, by employing the appropriate research methodology, the study will be conducted in district Nanded data of the year 202-2023. Four taluka will be selected randomly in this study area. From these taluka four villages were selected. 5 respondents were selected randomly from each village. Thus, in all 120 respondents were selected randomly. Dependent and independent variables, namely awareness, opinion, and constraints of farmers about Pradhan Mandtri Fasal Bima Yojana and Age, Caste, education and religion, occupation, type of family, size of family, annual income etc. The data so collected were subjected to analyses for which statistical tools, such as percentage, average,

1.9.3. Reference

2. Mote , S.S., Sharma. A., Panda. S. & Rathore. R. (2016). Impact of crop insurance on farmer's income in pune district of Maharashtra. Indian Journal of Economics & Development. : Vol.13.page no. 617-622.
3. Niranjan. H. K., R.S. Chouhan., Sharma. H.O., Akhilesh P., & Thaku.S.S. (2019). Insurance behaviouer of insured farmer under PMFBY in central india, (2019). Asian journal Of Agricultural, Extension, Economics & Sociology. : 37(2), 1-6.
4. Devi., Gupta. S. & Varma . M. (2020). Constraints faced by farmers getting the benefits of PMFBY. International Journal of Advances In Engeeneering and Mangement. Vol2 71-76.
5. Darshan. Y. Ramakrishnan. R., Pushpa. J. & Prabhakaran. K. (2021). Constraints and suggestions encountered by the beneficiaries under PMFBY in Tumkur district of Karnataka. Asian Journal of Agricultural Extension, Economics & Sociology.39(12) 33-37.
6. Niranjan.S. & Sreedaya. G. S. (2022). Perception of farmers towards crops insurance schemes in Kerala India. Asian Journal of Agricultural Extension, Economics & Sociology. 40(11) 437-447
7. Minstry of Agriculture and Farmers welfare.
8. Agrowon.
9. Study reports on effective implementation of Pradhan Mantri Fasal Bima Yojna
10. 2022.
11. Agro-Economic Research Centre Report -2018.

12. Shetkari Masik
13. https://www.iffcotokio.co.in
14. htts://pmfby.gov.in
15. Agriculture Statistics at Glance-2019
16. Krishi Jagran (Magazine)
17. Sheti Kranti . (Magazine)

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